Listing of the Claims:

1. (Currently amended) An apparatus for the treatment of air comprising a low power alternating current corona discharge ozone generator that has a power rating in the range of 4 watts to 50 watts mounted inside a chamber, the chamber being defined by an earthed casing comprising a metal or a plastics material impregnated or coated with a metallic material and having an air inlet and an air outlet and at least one air flow impeller formed and arranged for inducing a flow of air through said chamber from inlet to outlet in a non-rectilinear path, said ozone generator being formed and arranged for generating a restricted concentration of ozone and any other reactive species formed together therewith, within an inactivating zone contained within said chamber, through which said air flow is passed in use of said apparatus, which restricted concentration is sufficient effectively to inactivate airborne pollutant material entrained in said air flow, yet which restricted concentration decays sufficiently outside said inactivating zone so that the concentration of ozone in the cleaned air expelled from said apparatus is at a physiologically acceptable level without the use of an ozone decomposition catalyzer.

2. (Original) The apparatus of Claim 1 wherein said low power corona discharge ozone generator comprises a low power corona discharge device provided with a low power high voltage output transformer.

3. (Original) The apparatus of Claim 2 wherein the low power corona discharge device comprises concentric tubular metal gauze electrodes separated by a tubular strengthened glass dielectric.

4. (Original) The apparatus of Claim 3 wherein the glass dielectric is of titanium dioxide strengthened borosilicate glass.

5. (Canceled)

6. (Previously Presented) An apparatus according to claim 1 wherein said air flow impeller is formed and arranged so as to provide a flow rate of air through the apparatus in the range 50–2500 m^3 per hour.

7. (Previously presented) An apparatus according to claim 1 wherein said inlet is fitted with at least one filter.

8. (Previously presented) An apparatus according to claim 7 wherein said at least one filter is adapted for removing tobacco smoke oil and/or tar.

9. (Previously presented) An apparatus according to claim 1 wherein said outlet is fitted with at least one filter.

10. (Previously presented) An apparatus according to claim 7 wherein said filter is an electrostatic filter.

11. (Previously presented) An apparatus according to claim 7 wherein the inlet and outlet are disposed in proximity to each other and the apparatus provided with a single filter mounting so that respective different portions of the filter occlude the inlet and outlet, respectively.

12. (Original) An apparatus according to claim 1 wherein is used for said alternating current corona discharge ozone generator, an AC supply with a frequency in the range from 50 to 1000 Hz.

13. (Previously presented) An apparatus according to claim 1 wherein is used an AC supply with an operating voltage in the range from 1 to 6 kV.

14. (Original) An apparatus according to claim 1 wherein is used an AC supply providing a (starting) current in the range from 1 to 10 mA.

15. (Original) An apparatus according to claim 1 wherein is used an air flow impeller formed and arranged for inducing a flow of air through said chamber, in use of the apparatus, which air flow has a residence time in said chamber in the range from 0.2 to 20 seconds.

16. (Original) An apparatus according to claim 1 wherein is used a low power corona discharge device with a solid dielectric.

17. (Currently amended) A method of cleaning air ~~without the use of an ozone decomposition catalyzer,~~ comprising the steps of:

providing an apparatus according to claim 1;

powering the ozone generator of said apparatus so as to generate ozone in the inactivation zone of said apparatus; [[and]]

operating said airflow impeller so as to pass a flow of said air through said inactivation zone; and

exhausting the air from the inactivation zone through a catalyst-free decomposing zone in said chamber.

18. (New) An ozone-based device for treating pollutants in air comprising:

a grounded, conductive, enclosed chamber having an air inlet and an air outlet arranged to produce air flow therebetween;

an impeller having a motor for producing said flow;

an inactivating zone within said chamber proximate said inlet;

a low power ozone generator within the inactivating zone and in said flow, wherein said generator operates in a power consumption range of about 4 to 50 watts; and

a catalyst-free decomposing zone within said chamber proximate said outlet;

said chamber being arranged to move air from the inlet through the inactivating zone and the decomposing zone in a turbulent, non-straight line flow

whereby the ozone concentration in the air expelled from said chamber is less than about 0.3 ppm.

19 (New) A device as defined in Claim 18 further including an electrostatic post filter arranged proximate said outlet to receive and treat air from said decomposing zone.

20. (New) A device as defined in Claim 19 wherein the ozone generator is of tubular construction and comprises a borosilicate glass dielectric with stainless steel gauge electrodes on opposite sides thereof.

21. (New) A device as defined in Claim 18 further including a surge protected transformer for powering said motor.

22. (New) A method of removing pollutants from air comprising the steps of:

causing said air to flow turbulently and non-rectilinearly through an inactivating zone and a catalyst free decomposing zone both of which are wholly within a grounded conductive chamber;

operating an ozone generator within the inactivating zone at a power consumption level of between about 4-50 watts; and

passing the air from the decomposing zone through an electrostatic filter such that the ozone concentration in the filtered air expelled from said chamber is less than about 0.3 ppm.